

31-09-01

CURRICULUM VITAE
CLAUSTRO DE PROFESORES

CURRICULUM VITAE

1. **NOMBRE:** AQUILES ARANCIBIA ORREGO

2. **GRADO ACADÉMICO:** Químico Farmacéutico

3. **POSICIÓN ACTUAL:** Profesor Titular

4. **LÍNEA DE INVESTIGACIÓN:** Farmacocinética y Biofarmacia

5. **ACTIVIDAD INVESTIGACIÓN ACTUAL:**

6. **PROYECTOS:** (Últimos 5 años)

Nacionales: FONDECYT 101 1072 "Efecto de la altura sobre la disposición de medicamentos con alta unión a proteínas".
Investigador Principal.

Internacionales:

7. **PUBLICACIONES ISI EN LOS ÚLTIMOS 5 AÑOS:**

- Ritschel W.A., Paulos C., Pezzani M., Agrawal M., Wetzelsberger K., Lucker P.W., **Arancibia, A.** (1996). "Urinary excretion of meperidine and normeperidine in man upon acute and chronic exposure to high altitude". *Meth, Find. Exp. Clin. Pharmacol.* 18(1) 49-53.

- A.M. Thielemann, N. Manquez, E. Pinilla, M.N. Gai, P. Romero **A. Arancibia**, and H. Chávez. (1996). "Chronopharmacokinetics of theophylline administered as a controlled-release tablet". *International Journal of Clinical Pharmacology and Therapeutics*, vol. 34(3): 130 - 133.

- Ritschel W.A., Paulos C., Pezzani M., Agrawal M., Wetzelsberger K., Lucker P.W., **Arancibia, A.** (1996). "Pharmacokinetics of meperidine in healthy volunteers after short and long-term exposure to high altitude". *J. Clin. Pharmacol.* 36, 610-616.

- **Arancibia, A.** (1996). "La farmacocinética en su proyección clínica". *Anales Real Academia de Farmacia (España)*. Suplemento.

- Ritschel WA., Paulos C., **Arancibia A.** Agrawal MA., Wetzelsberger KM, Lucker PW. 1998). "Urinary excretion of acetazolamide in healthy volunteers after short- and long-term exposure to high altitude". *Meth, Find. Exp. Clin. Pharmacol.* 20(2):133-137.

- Ritschel WA, Paulos C, **Arancibia A**, Agrawal MA, Wetzelsberger KM, Lucker PW. (1998). "Pharmacokinetics of acetazolamide in health volunteers after short-an long-term exposure to high altitude". *J. Clin. Pharmacol.* 38(6):533-9.

- Gai MN, Thielemann AM, **Arancibia A**, (2000). "Effect of three different diets on the bioavailability of a sustained release lithium carbonate matrix tablet". *Int. J. Cklin. Pharmacol. Ther.* 38(6)_320-6.

CURRICULUM VITAE

1. **NOMBRE:** BRUCE KENNEDY CASSELS NIVEN
LUGAR Y FECHA DE NACIMIENTO: 20-08-1939. Buenos Aires, Argentina.
2. **GRADO ACADÉMICO:**
Doctor en Ciencias. Universidad de Buenos Aires, Argentina (1966).
3. **POSICION ACTUAL:**
Profesor Titular
4. **LÍNEA DE INVESTIGACIÓN:**
AREA: Química Orgánica – Química Médica
5. **ACTIVIDAD INVESTIGACIÓN ACTUAL:** Química Médica
Neurotransmisión y Enfermedades Neurodegenerativas.
6. **PROYECTOS: (Ultimos 5 años)**
Internacionales: FORGE (USA), ECOS-CONICYT (France-Chile), OAS (Organization of American States), CONACYT (Argentina), Fundación Andes-Antorchas-Vitae (Chile-Argentina-Brazil).
Nacionales: FONDECYT, Cátedra Presidencial en Ciencias, 1996. Instituto Milenio para estudios avanzados en Biología Celular y Biotecnología.
7. **PUBLICACIONES ISI EN LOS ULTIMOS 5 AÑOS:**
 1. S. Sepúlveda-Boza, **B.K. Cassels**, Plant metabolites active against *Trypanosoma cruzi*, *Planta Medica*, **62**, 98-105 (1996).
 2. R. Bannach, A. Valenzuela, **B.K. Cassels**, L.J. Núñez-Vergara, H. Speisky. Cytoprotective and antioxidant effects of boldine on *tert*-butyl-hydroperoxide-induced damage to isolated hepatocytes, *Cell Biol. Toxicol.*, **12**, 89-100 (1996).
 3. M. Marder, H. Viola, C. Wasowski, C. Wolfman, PG. Waterman, **B.K. Cassels**, J.H. Medina, AC Paladini. 6-Bromoflavone, a high affinity ligand for central benzodiazepine receptors, is a member of a family of active flavonoids, *Biochem. Biophys. Res. Commun.*, **223**, 384-389 (1996).

4. M. Asencio, **B.K. Cassels**, V. Manríquez, D. Boys, Structure of (S)-1,10-dimethoxy-2,9-dihydroxyaporphinium chloride (boldine hydrochloride), *Acta Cryst.*, **C52**, 1581-1583 (1996).
5. Y. Madrero, M. Elorriaga, S. Martínez, M.A. Noguera, **B.K. Cassels**, P. D'Ocon, M.D. Ivorra, A possible structural determinant of selectivity of boldine and derivatives for the α_{1A} -adrenoceptor subtype, *Brit. J. Pharmacol.*, **119**, 1563-1568 (1996).
6. M. Reyes-Parada, C. Scorza, V. Romero, R. Silveira, J.H. Medina, D. Andrus, D.E. Nichols, **B.K. Cassels**, (\pm)-1-(2,5-Dimethoxy-4-ethylthiophenyl)-2-aminopropane (ALEPH-2), a novel putative anxiolytic agent lacking affinity for benzodiazepine sites and serotonin-1A receptors, *Naunyn-Schmiedeberg's Arch. Pharmacol.*, **354**, 579-585 (1996).
7. R.C. Peña, **B.K. Cassels**, Phylogenetic relationships among Chilean *Sophora* species, *Biochem. Syst. Ecol.*, **24**, 725-733 (1996).
8. M. Gotteland, I. Jiménez, O. Brunser, L. Guzmán, S. Romero, **B.K. Cassels**, H. Speisky Protective effect of boldine in experimental colitis, *Planta Med.*, **63**, 311-315 (1997).
9. M.C. Scorza, C. Carrau, R. Silveira, G. Zapata-Torres, **B.K. Cassels**, M. Reyes-Parada, Monoamine oxidase inhibitory properties of some methoxylated and alkylthio amphetamine derivatives. Structure-activity relationships, *Biochem. Pharmacol.*, **54**, 1361-1369 (1997).
10. M.A. Morales, S.E. Bustamante, G. Brito, D. Paz, **B.K. Cassels**, Cardiovascular effects of plant secondary metabolites norarmepavine, coclaurine and norcoclaurine, *Phytother. Res.*, **12**, 1-7 (1998).
11. G. Zapata-Torres, J. Parra-Mouchet, **B.K. Cassels**, ^{13}C NMR and theoretical studies of internal rotation in methylated anilines, *Bol. Soc. Chil. Quím.*, **43**, 13-26 (1998).
12. M.A. Torres, **B.K. Cassels**, M.C. Rezende, α_1 -Adrenergic and 5-HT $_{2A/2C}$ -serotonergic effects of some α -alkoxyphenylethylamines on isolated rat thoracic aorta, *Gen. Pharmacol.*, **31**, 51-54 (1998).
13. C. Delporte, N. Backhouse, R. Negrete, P. Salinas, P. Rivas, **B.K. Cassels**, A. San Feliciano, Antipyretic, hypothermic and antiinflammatory activities and metabolites from *Solanum ligustrinum* Lood.

Phytother. Res. **12**, 118-122 (1998).

14. N. Cabedo, P. Protais, **B.K. Cassels**, D. Cortes,
Synthesis and dopamine receptor selectivity of the benzyltetrahydro-isoquinoline (*R*)-(+)-*nor-roefractine*,
J. Nat. Prod., **61**, 709-712 (1998).

15. L. Mejías, S. Sepúlveda, R. Araya, **B.K. Cassels**, M.C. Rezende,
The regio selective bromination of 4,4-dimethyl-5,8-dihydroxy-4(*H*)-naphthalen-1-one.
Synth. Commun., **28**, 4365-4370 (1998).

16. L. Mejías, M.C. Rezende, S. Sepúlveda-Boza, R. Araya-Maturana, D. Boys, **B.K. Cassels**, V. Manríquez,
Crystal structure of 7-bromo-5,8-dihydroxy-4,4-dimethyl-4*H*-naphthalen-1-one.
Bol. Soc. Chil. Quím., **43**, 485-492 (1998).

17. P. Rivas, **B.K. Cassels**, A. Morello, Y. Repetto,
Effects of some α -carboline alkaloids on intact *Trypanosoma cruzi* epimastigotes.
Comp. Biochem. Physiol. C, **122**, 27-31 (1999).

18. M. Asencio, B. Delaquerrière, **B.K. Cassels**, H. Speisky, E. Comoy, P. Protais,
Biochemical and behavioral effects of boldine and glaucine on dopamine systems.
Pharmacol. Biochem. Behav., **62**, 7-13 (1999).

19. R. Araya-Maturana, **B.K. Cassels**, T. Delgado-Castro, J.A. Valderrama, B.E. Weiss López,
Regioselectivity in the Diels-Alder reaction of 8,8-dimethylnaphthalene-1,4,5(8*H*)-trione with 2,4-hexadien-1-ol.
Tetrahedron, **55**, 637-648 (1999).

20. F.A. Dajas-Bailador, M. Asencio, C. Bonilla, M.C. Scorza, C. Etcheverry, M. Reyes Parada, R. Silveira, P. Protais, G. Russell, **B.K. Cassels**, F. Dajas,
Dopaminergic pharmacology and antioxidant properties of pukateine, a natural product lead for the design of agents increasing dopamine neurotransmission,
Gen. Pharmacol., **32**, 373-379 (1999).

21. S. Martínez, Y. Madrero, M. Elorriaga, M.-A. Noguera, **B.K. Cassels**, E. Sobarzo, P. D'Ocon, M.D. Ivorra,
Halogenated derivatives of boldine with high selectivity for α_{1A} -adrenoceptors in rat cerebral cortex,
Life Sci., **64**, 1205-1214 (1999).

22. G. Vallejos, **B.K. Cassels**, M.C. Rezende, S. Sepúlveda-Boza,
Total synthesis of annofoline,
Synth. Commun., **29**, 809-814 (1999).

23. M. Osorio-Olivares, **B.K. Cassels**, S. Sepúlveda-Boza, M.C. Rezende,
A novel route to 5,7-dimethoxy-6-hydroxyflavone,
Synth. Commun., **29**, 815-819 (1999).

24. R. Araya-Maturana, **B.K. Cassels**, T. Delgado-Castro, C. Hurtado-Guzmán, C. Jullian,
Complete assignment of the ^{13}C NMR spectra of a series of 5,8-disubstituted 4,4-dimethylantracene-1,9,10(4*H*)triones,
Magn. Reson. Chem., **37**, 312-316 (1999).
25. A.J.G.C. Silva, M.T.S. Giotto, Y.P. Mascarenhas, S. Sepúlveda-Boza, **B.K. Cassels**,
Crystal structures of (*E*)-1-(3,4,5-trimethoxyphenyl)-2-nitroethene and (*E*)-1-(3,4,5-trimethoxyphenyl)-2-nitropropene,
Bol Soc. Chil. Quím., **44**, 412-422 (1999).
26. Rivas P, **Cassels BK**, Morello A, Repetto Y.
Effects of some beta-carboline alkaloids on intact *Trypanosoma cruzi* epimastigotes.
Comp. Biochem. Physiol. C. Pharmacol Toxicol Endocrinol, **122**(1):27-31 (1999)
27. Dajas-Bailador FA, Asencio M, Bonilla C, Scorza MC, Echeverry C, Reyes-Parada M, Silveira R, Protais P, Russell G, **Cassels BK** Dajas F.
Dopaminergic pharmacology and antioxidant properties of pukateine, a natural product lead for the design of agents increasing dopamine neurotransmission.
Gen Pharmacol. **32**(3):373-9 (1999).
28. E.M. Sobarzo-Sánchez, J. Arbaoui, P. Protais, **B.K. Cassels**,
Halogenated boldine derivatives with enhanced monoamine receptor selectivity,
J. Nat. Prod., **63**, xxx-xxx (2000).
29. I. Jiménez, A. Garrido, R. Bannach, M. Gotteland, A. Valenzuela, **B.K. Cassels**, H. Speisky,
Protective effects of boldine against free radical-induced erythrocyte lysis, *Phytother. Res.*, **14**, xxx-xxx (2000).
30. I. Jiménez, **B.K. Cassels**, H. Speisky,
Biological disposition of boldine: *In vitro* and *in vivo* studies,
Phytother. Res., **14**, xxx-xxx (2000).
31. C. Acuña, C. Scorza, M. Reyes-Parada, **B.K. Cassels**, J.P. Huidobro-Toro,
Aleph-2, a suspected anxiolytic and putative hallucinogenic phenylisopropylamine derivative. is a 5-HT_{2A} and 5-HT_{2C} receptor agonist,
Life Sci., **65**, xxx-xxx (2000).
32. Andreu I, Cortes D, Protais P, **Cassels B.K.**, Chagraoui A, Cabedo N.
Preparation of dopaminergic N-alkyl-benzyltetrahydroisoquinolines using one-pot procedure in acid medium.
Bioorg Med Chem **8**(5):889-95 (2000)
33. Dagnino-Subiabre A, **Cassels B.K.**, Baez S, Johansson AS, Mannervik B, Segura-Aguilar J.
Gluthathione transferase M2-2 catalyzes conjugation of dopamine and dopa o-quinones.
Biochem Biophys Res Commun **274**(1):32-6 (2000).

CURRICULUM VITAE

1. **NOMBRE:** MARIA NELLA GAI HERNANDEZ
2. **GRADO ACADÉMICO:** Doctor en Ciencias Farmacéuticas, Universidad de Chile.
(1993)
3. **POSICIÓN ACTUAL:** Profesor Asociado
4. **LÍNEA DE INVESTIGACIÓN:** Influencia de alimentos sobre la farmacocinética de Medicamentos formulados en sistemas de liberación Controlada.
5. **ACTIVIDAD INVESTIGACIÓN ACTUAL:**
6. **PROYECTOS: (Últimos 5 años)**

Nacionales: FONDECYT 101-1072 "Efecto de la altura sobre la disposición de Medicamentos con alta unión a proteínas".
Co-Investigador

Internacionales:
7. **PUBLICACIONES ISI EN LOS ÚLTIMOS 5 AÑOS:**

- Thielemann A.M., Pinilla E., Gai M.N., Arancibia A., y Chávez H. (1996). Cronofarmacocinética. Acta Farmacéutica Bonaerense Int. J. Clin. Pharmacol. Ther. 34: 130-133.

- Thielemann A.M., Manquez N., Pinilla E., Gai M.N., Romero P., Arancibia A., and Chávez H. "Chronopharmacokinetics of theophylline administered as a controlled-release tablet". International Journal of Clinical Pharmacology and Therapeutics, 1996. vol. 34, nº 3, (130 - 133).

- Gai M.N., Isla A., Andonaegui M.T., Thielemann A.M., Seitz C. (1997). Evaluation of the effect of 3 different diets on the bioavailability of 2 sustained release theophylline matrix tablets. Int. J. Clin. Pharmacol. Ther. 35: 565-571.

- **Gai M.N.**, Ferj S., García E., Seitz C., Thielemann A.M., Andonaegui M.T. Evaluation of the *in vitro* and *in vivo* performance of two sustained release lithium carbonate matrix tablets. Effect of different diets on the bioavailability. Drug Development and Industrial Pharmacy 25(2):131-40 (1999)
- Velasco-De-Paola MV, Santoro MI, **Gai MN**. Dissolution kinetics evaluation of controlled-release tablets containing propranolol hydrochloride. Drug Dev Ind Pharm 25(4):535-41 (1999).
- Andonaegui MT, Barria JL, Thielemann AM, Seitz C, **Gai MN**. In vitro conditions for the study of the *in vivo* performance of sustained-release theophylline matrix tablets administered in fasted conditions and with a high-fat diet. Drug Dev Ind Pharm. 25(11):1199-203.
- **Gai MN**, Thielemann AM, Arancibia A. Effect of three different diets on the bioavailability of a sustained release lithium carbonate matrix tablet. Int. J Clin Pharmacol Ther. 38(6):320-6 (2000).

CURRICULUM VITAE

1. NOMBRE: YEDY ISRAEL JACARD

LUGAR Y FECHA DE NACIMIENTO : 19-09-1939. Temuco Chile.

2. GRADO ACADÉMICO :

Doctor en Farmacología, Universidad de Toronto. 1965

3. POSICIÓN ACTUAL: Profesor Titular

4. LÍNEA DE INVESTIGACIÓN:

AREA : Farmacología y Bioquímica Molecular

5. ACTIVIDAD INVESTIGACIÓN ACTUAL :

Estudios dirigidos a la terapia génica del alcoholismo y daño hepático usando sondas de antisentido y oligonucleótidos antígeno y/o de la inserción de genes protectores del alcoholismo.

6. PROYECTOS:

Internacionales: Instituto Nacional de Salud, USA. Proyectos al Mérito Científico entregado por NIH.

Nacionales: Fondecyt, Cátedra Presidencial en Ciencias, Chile. Fondef.

7. PUBLICACIONES ISI EN LOS ULTIMOS 5 AÑOS:

1. **Israel Y., Rubin E.** (1996) Alcohol-induced liver injury. In Drug-Induced Hepatotoxicity: Handbook of Experimental Pharmacology vol. 121 (Ed. RG Cameron, G. Feuer and F. De la Iglesia) pp 611-628 Springer, Berlin.

2. Clot, P., Albano, E., Eliasson, E., Tabone, M., Arico, S., **Israel Y.**, Moncada C., Ingelman Sunberg, M. (1996) Cytochrome P4502E1 hydroxyethyl radical adducts as the major antigen in autoantibody formation among alcoholics. *Gastroenterology* **111**: 206-216.

3. **Israel Y.**, Hollander, O., Sánchez-Craig, M., Booker, S., Miller, V., Gingrich, R., and Rankin, G. (1996) Screening for problem drinking and counseling by the primary care physician-nurse team. *Alcoholism: Clin. Exp. Res.* **20**: 1443-1450.

4. Vitala, K., **Israel Y.**, Blake, J.E., Niemela, O. (1997) Serum IgA, IgG and IgM antibodies directed against acetaldehyde-derived epitopes: relationship to liver disease severity and alcohol consumption. *Hepatology*, **25**: 1418-1424.

5. **Israel, Y.** and Rubin E.

Alcohol-Induced Liver Injury. In Drug-Induced Hepatotoxicity: Handbook of Experimental Pharmacology vol. 121 (Ed. RG Cameron, G Feuer and F de la Iglesia) pp 611-628 Springer, Berlin, 1996.

6. Clot, P., Albamo, E. Eliasson. E. Tabone, M. Arico, S. **Israel, Y.** Moncada, C., Ingelman Sunberg, M. Cytochrome P450e1 Hydroxyethyl Radical Adducts As The Major Antigen In Autoantibody Formation Among Alcoholics .
Gastroenterology 111: 206-216, 1996

7. **Israel Y,** Hollander O., Sanchez-Craig M., Booker S., Miller V., Gingrich R, and Rankin
Screening For Problem Drinking And Counseling By The Primary Care Physician-Nurse Team. Alcoholism. Clin. Exp. Res. 20:1443-1450, 1996

8. **Israel, Y.**
Antibodies To Ethanol-Derived Adducts. Pathogenic Significance.
Gastroenterology. 113(1):353- 355, 1997

9. Ross, A.D., Saldivia V., Oporto, B., Carmichael F.J. Cameron R. And **Israel Y.**
Circulating Neutrophils And Liver Injury In Animal Models Of Experimental Alcoholic Liver Disease. Alcoholism Clin. Exp Res. 22: 197-201, 1998

10. Tu, G-C, Cao Q-N, Zhou, F and **Israel Y.**
Tetranucleotide Ggga Motif In Primary Transcripts: Novel Target Site For Antisense Design. J. Biol. Chem. 273: 25125-25131, 1998

11. Ross, A.D. Janes, N. Dey, I. and **Israel, Y.**
Electron Spin Resonance Studies On The Mechanism Of Hydroxyl Radical Generation And Alpha-Proteinase Inhibitor Inactivation By Neutrophils. J. Pharmacol. Exp. Ther. 285: 1233-1238, 1998.

12. Ponnappa , BC, Dey I., Tu G-C Zhou F., Garver E., Cao Q-N and **Israel Y.**
In Vivo Delivery Of Antisense Oligodeoxynucleotides Into Rat Kupffer Cells
J. Liposome Res. 8: 479-493, 1998 1998

13. Moncada, C and **Israel Y.**
Generation Of Acetate And Production Of Ethyl Lysine In The Reaction Of Acetaldehyde Plus Albumin. Alcohol 17: 87-91, 1999

14. Anni H., **Israel Y.**
Characterization Of Adducts Of Ethanol Metabolites With Cytochrome C.
Alcohol Clin. Exp. Res. 23(1): 26-37 1999

15. Spandorfer JM, **Israel Y,** Turner BJ.
Primary care physicians'views on screening and management of alcohol abuse: inconsistencies with national guidelines.
J Farm Pract. (1999) 48(11):899-902

16. Viitala K, Makkonen K, **Israel Y,** Lehtimaki T, Jaakkola O, Koivula T, Blake JE, Niemela O.

Autoimmune responses against oxidant stress and acetaldehyde-derived epitopes in human alcohol consumers. *Alcohol Clin Exp Res.* (2000) 24(7):1103-9

17. Garver E, Ross AD, Tu GC, Cao QN, Zhou F, **Israel Y.**
Paradigm to test a drug-induced aversion to ethanol. (2000) 35(5):435-8

18. Ponnappa BC, Dey I, Tu GC, Zhou F, Aini M, Cao QN, **Israel Y.**
In vivo delivery of antisense oligonucleotides in pH-sensitive liposomes inhibits lipopolysaccharide-induced production of tumor necrosis factor alpha in rats. *J. Pharmacol Exp Ther.* (2001) 297(3):1129-36

19. Lakshman R, Tsutsumi M, Ghosh P, Takase S, Anni H, Nikolaeva O, **Israel Y,** Anton RF, Lesch OM, Helender A, Eriksson G, Jeppson JO, Marmillot P, Rao MN. Alcohol biomarkers: clinical significance and biochemical basis. *Alcohol Clin Exp Res.* (2001) 25(5 Suppl ISBRA):67S-70S

CURRICULUM VITAE

1. NOMBRE: HERNAN LARA PEÑALOZA

LUGAR Y FECHA DE NACIMIENTO: 27-10-1952, Chile.

2. GRADO ACADÉMICO :

Doctor en Bioquímica, Universidad de Chile. 1985

3. POSICIÓN ACTUAL:

Profesor Titular

4. LÍNEA DE INVESTIGACIÓN:

AREA : Neuroendocrinología y Neurofarmacología

5. ACTIVIDAD INVESTIGACIÓN ACTUAL : A.- Participación de los factores neurotróficos como: *a.*- factores tróficos para la supervivencia de neuronas simpáticas y, *b.*- Constituyentes neuroendocrinos de la respuesta ovárica.
B.- Participación de factores neurotróficos y endocrinos como mediadores de la apoptosis y sobrevida de neuronas del sistema nervioso central.

6. PROYECTOS:

Internacionales: Rockefeller, Third World Academy of Sciences (TWA).

Nacionales: Fondecyt, DTI.

7. PUBLICACIONES ISI EN LOS ULTIMOS 5 AÑOS:

1. Dissen G.A., Hill D.F., Costa M.E., Dees L, Lara H.E., Ojeda S.R. (1996). A role for *trkA* nerve growth factor receptors in mammalian ovulation. *Endocrinology* **137**, 198-209.

2. Mayerhofer A, Danilchik M., Francis Pau K.Y., Lara H.E., Roussel L.D., S.R. Ojeda. (1996). The testis of prepubertal Rhesus Monkeys receives a dual catecholaminergic input provided by the extrinsic innervation and an intragonadal source of catecholamines. *Biology of Reproduction* vol. **55**, 509-518.

3. Paredes A, Galvez A, Leyton V, Aravena G, Fiedler JL, Bustamante D and HE Lara. (1998). Stress promotes development of ovarian cyst in rats. The possible role of sympathetic nerve activation. *Endocrine* **8**:309-315.

4. Sepulveda CM, Troncoso CC, Lara H, Cardenas AM. (1998). Intracellular calcium and arachidonic acid increase SNAP-25 expression in cultured rat hippocampal explants, but not in cultured rat cerebellar explants. *Neuroscience Letters* **252**:127-130.

5. Gálvez A, Paredes A, Fiedler JL, Venegas M, Lara HE. (1999). Effects of adrenalectomy on the stress-induced changes in ovarian sympathetic tone in the rat. *Endocrine* 10:131-135.
6. Lara HE, Dissen GA, Leyton V, Paredes A, Fuenzalida H, Fiedler JL, Ojeda SR. (2000). An increased intraovarian synthesis of nerve growth factor and its low-affinity receptor is a principal component of steroid-induced polycystic ovary in the rat. *Endocrinology*, 141:1059-1072.
7. Dissen GA, Lara HE, Leyton V, Paredes A, Hill DF, Costa ME, Martinez-Serrano A, Ojeda SR. (2000). Intraovarian excess of nerve growth factor increases androgens secretion and disrupts estrous cyclicity in the rat. *Endocrinology*, 141:1073-1082.
8. Garcia-Palomero E, Montiel C, Herrero CJ, Garcia AG, Alvarez RM, Arnalich FM, Renart J, Lara H, Cárdenas AM, (2000). Multiple calcium pathways induce the expression of SNAP-25 protein in chromaffin cells. *J Neurochem*, 74:1049-1058.

CURRICULUM VITAE

1. **NOMBRE** : **SERGIO LAVANDERO GONZÁLEZ**
LUGAR Y FECHA DE NACIMIENTO : 19-09-1959. Santiago, Chile
2. **GRADO ACADÉMICO:** Doctor en Bioquímica
3. **POSICIÓN ACTUAL:** Profesor Titular
4. **LINEA DE INVESTIGACIÓN:** Transducción de señal en Sistema Cardiovascular
5. **ACTIVIDAD ACTUAL DE INVESTIGACIÓN:**
Estudio de la participación local de factores de crecimiento (IGF-1, angiotensina II) y estímulos mecánicos y los mecanismos de transducción de señal en la hipertrofia cardíaca
y la apoptosis enfocada sobre: a) receptor a IGF-1 cardíaco y cascada de las integrinas; b) regulación génica de IGF-1 y del sistema renina-angiotensina y c) polimorfismo ACE
6. **PROYECTOS: (últimos 5 años)**
National: FONDECYT, DID-U. Chile.
International: OMS.
7. **PUBLICACIONES ISI EN LOS ÚLTIMOS 5 AÑOS:**
 1. Meléndez J, Jalil J, Lavandero S. (1996) Cyclic AMP-dependent protein kinase and mechanical heart function in ventricular hypertrophy induced by pressure overload or secondary to myocardial infarction. *J Mol Cell Cardiol* **28**: 1073-1083.
 2. Centella C, Muñoz de la Peña A, Medina J, Sapag-Hagar M, Ocaranza MP, Escobedo J, Meléndez, Lavandero S. (1996) Synthesis and biochemical effects of 3-methyl tyrphostin (2-cyano-3-(4-hydroxyphenyl)butenethioamide): a new protein tyrosine kinase inhibitor. *Am J Therapeutics* **3**: 423-426.
 3. Foncea R., Andersson M., Ketterman A., Blakesley V., Sapag-Hagar, M., Sugden P.H., LeRoith D., Lavandero, S. (1997) Insulin-like growth factor-1 rapidly activates multiple signal transduction pathways in cultured rat cardiac myocytes. *Journal Biological Chemistry* **272**: 19115-19124.

4. Hinrichsen J.P., Neira M., López M., Chiong M., Ocaranza M.P., Gallardo R., Rutman M., Blamey J., **Lavandero, S.** (1997) Omeprazole, a specific gastric secretion inhibitor on oxynticopeptic cells, reduces gizzard erosion in broiler chicks fed with toxic fish meals. *Comparative Biochemistry & Physiology* **117C**: 267-273.
5. **Lavandero, S.**, Foncea R., Pérez V., Sapag-Hagar M. (1998). Effect of inhibitors of signal transduction on IGF-1-induced protein synthesis associated with hypertrophy in cultured neonatal rat ventricular myocytes. *FEBS Letters* **422**, 193-196.
6. Ebensperger R., Acevedo E., Meléndez J., Corbalán R., Acevedo M., Sapag-Hagar M., Jalil J.E., **Lavandero, S.** (1998) Selective increase in cardiac IGF-1 in a rat model of ventricular hypertrophy. *Biochem. Biophys. Res. Commun.* **243**, 20-24.
7. **Lavandero S**, Chappuzeau A, Sapag-Hagar, Oka T. In vivo and in vitro evidences of basic fibroblast growth factor action in mouse mammary gland. *FEBS Letters* **349**: 3551-355, 1998.
8. Jalil JE, Piddo AM, Cordova S, Chamorro G, Braun S, Jalil R, Vega J, Jadue L, **Lavandero S**, Lastra P. Prevalence of the angiotensin-I-converting enzyme insertion/deletion polymorphism, plasma ACE and cardiac structure in normotensive chilean population. *Am. J. Hypertens* **12**: 697-704,1999.
9. Jalil JE, Ebensperger R, Meléndez J, Acevedo E, Sapag-Hagar M, González-Jara F, Gálvez A, Pérez-Montes V, **Lavandero S**. Effects of antihypertensive treatment on cardiac IGF-1 during prevention of ventricular hypertrophy in the rat. *Life Sciences* **64**: 1603-1612,1999.
10. Morales MP, Galvez A, Eltit JM, Ocaranza P, Díaz-Araya G, **Lavandero S**. IGF-1regulates apoptosis of cardiac myocyte induced by osmotic-stress. *Biochem Biophys Res Commun.* (2000) **270**(3):1029-35
11. Foncea R, Galvez A, Pérez V, Morales MP, Calixto A, Melendez J, González-Jara F, Díaz-Araya G, Sapag-Hagar M, Sugden PH, LeRoith D, **Lavandero S**. Extracellular regulated kinase, but not protein kinase C, is an antiapoptotic signal of insulin-like growth factor-1 on cultured cardiac myocytes. *Biochem Biophys Res Commun* (2000) **273**(2):736-44
12. Galvez A, Morales MP, Eltit JM, Ocaranza P, Carrasco L, Campos X, Sapag-Hagar M, Díaz-Araya G. **Lavandero S**. A rapid and strong apoptotic process is triggered by hyperosmotic stress in cultured rat cardiac myocytes. *Cell Tissue Res.* (2001) **304**(2):279-85.

CURRICULUM VITAE

1. **NOMBRE:** Dr. Ricardo B. MACCIONI

LUGAR Y FECHA DE NACIMIENTO: 20 de Enero de 1946

2. **GRADO ACADEMICO:** Doctor en Ciencias (Dr.Sci.) 1975

3. **POSICION ACTUAL:** Profesor Titular, Facultad de Ciencias. Director Instituto Milenio de Estudios Avanzados en Biología Celular y Biotecnología.

4. **LINEA DE INVESTIGACION:** Estructura y Organización del Citoesqueleto. Bases Moleculares de la Enfermedad de Alzheimer.

AREA: Biología Celular/ Neurociencia.

5. **ACTIVIDAD DE INVESTIGACION ACTUAL:** Proteínas estructurales; interacciones heterólogas entre proteínas; sistemas biológicos de autoensamblaje; citoesqueleto en la diferenciación celular; regulación del ensamblaje de microtúbulos en células normales y transformadas; proteínas Tau en la formación de los PHF's en la enfermedad de Alzheimer; eventos moleculares extracelulares e intraneuronales en la génesis del Alzheimer.

6. **PROYECTOS: (Ultimos 5 años)**

7. **PUBLICACIONES ISI ULTIMOS 5 AÑOS:**

1. J.P. Henriquez, V. Cambiazo, and R.B. Maccioni (1996) "Tubulin domains for the interaction of microtubule-associated protein DMAP-85 from *Drosophila melanogaster*". *Molecular and Cellular Biochemistry* **158**: 149-159

2. D. Cross, L. Tapia, J. Garrido and R.B. Maccioni (1996) "Tau-like proteins associated with centrosomes in cultured cells". *Experimental Cell Research* **229**: 378-388

3. G. Farias, C. González and R.B. Maccioni (1997) "Immunological characterization of epitopes on tau of Alzheimer's type and chemically modified tau protein". *Molecular and Cellular Biochemistry* **168**: 59-67

4. M. Gonzalez, Cambiazo, V., and R.B. Maccioni (1998) "The interactions of Mip-90 with microtubules and actin filaments in human fibroblasts". *Experimental Cell Research* **239**: 243-253

5. C. Capote, C. and R.B. Maccioni (1998) "The association of tau-like proteins with vimentin filaments in cultured cells". *Experimental Cell Research* **239**: 202-213

6. M. Depix, J. Martínez, J. Rovirosa, A. San Martín and **R.B. Maccioni** (1998) "The compound 14-keto-stypodiol diacetate disassembles microtubules and inhibits cell invasiveness in DU-145 prostate cancer cells". *Molecular and Cellular Biochemistry* **187**: 191-199
7. G. Paglini, G. Pigino, G. Morfini, **R.B. Maccioni**, S. Quiroga, A. Ferreira and A. Cáceres (1998) "Evidence for the participation of the neuron-specific cdk5 activator, P35, during laminin-enhanced axonal growth". *Journal of Neurosciences* **18**: 9858- 9869
8. C. González-Billault, G. Farías and **R.B. Maccioni** (1998) "Glycation of tau to an Alzheimer's type protein interferes with its interaction with microtubules". *Cellular and Molecular Biology* **44**: 1117- 1127
9. G. Ramirez, A. Alvarez, J. García-Abreu, V. Moura-Neto and **R.B. Maccioni** (1999) "Regulatory roles of tau in neuronal morphogenesis. Involvement of the extracellular matrix". *Braz. J. Med. Biol. Res.* **32**: 611-618
10. V. Cambiazo, M. González, C. Isamit and **R.B. Maccioni** (1999) "Structural-functional relationships of the microtubule-interacting protein Mip-90 and the heat-shock protein hsp-90". *FEBS Lett.* **457**:343-347
11. A. Alvarez, R. Toro, A. Cáceres and **R.B. Maccioni** (1999) "Inhibition of tau phosphorylating kinase cdk-5 by butyrolactone and tau antisense probes prevents amyloid-induced neuronal death". *FEBS Lett.* **459**: 421-426
12. Saragoni, L., Hernández, P. and **Maccioni, R.B.** (2000) "Differential association of tau with subsets of microtubules containing postrationally modified tubulin variants in neuroblastoma cells". *Neurochemical Research* **24**: 59-70
13. Cross, D., Muñoz, JP, Hernández, P. and **Maccioni, R.B.** (2000) "Nuclear and cytoplasmic tau proteins from human non-neuronal cells share common structural/functional features with brain tau". *Journal Cellular Biochemistry* (In press)
14. J-P. Muñoz, A. Alvarez, and **R.B. Maccioni** (2000) "Regulation of the expression of the cyclin-dependent protein kinase cdk5 during laminin-induced neuritic development in neuroblastoma cells" (submitted)
15. V. Cambiazo, M. González and **R.B. Maccioni** (2000) "DMP85, a novel microtubule-associated protein that interacts with microtubules and microfilaments during *Drosophila* embryonic development" (submitted)
15. **R.B. Maccioni**, J.P. Muñoz and C. Otth (2000) "The protein kinase cdk5: structural aspects, roles in neurogenesis and involvement in Alzheimer's pathology". *European J. Biochemistry*. Review by invitation (In press).

CURRICULUM VITAE

1. NOMBRE: ANTONIO MORELLO CASTÉ

LUGAR Y FECHA DE NACIMIENTO: 29 de enero de 1938. Santiago, Chile.

2. GRADO ACADEMICO: Doctor en Ciencias

3. POSICION ACTUAL: Profesor Titular.

4. LINEA DE INVESTIGACION: Modo de acción de drogas antiparasitarias y antineoplásicas al nivel molecular.

AREA: Bioquímica y Biología Molecular

5. ACTIVIDAD INVESTIGACION ACTUAL:

- Factores de resistencia a Drogas en el *Trypanosoma cruzi* y otros parásitos.
- Evaluación de nuevas drogas antichagásicas.
- Resistencia drogas en líneas celulares neoplásicas.

6. PROYECTOS: (Ultimos 5 años)

1. Biología Molecular de parásitos. Metabolismo y función del Glutión en *Trypanosoma cruzi*. Financiado por FONDECYT-CHILE(1996-1998) N°1961095.
2. Investigador responsable del Proyecto. Implicación del Glutión y la Glicoproteína-P en la resistencia de fármacos en *Leishmania* y *Trypanosoma cruzi*. Investigador responsable español-Francisco Gamarro. Financiado por CSIC-Universidad de Chile (1997-1998) y (1999-2000)
3. Investigador de Network for Research and training in Parasitic Diseases in the Southern cone of Latin America. Sida/SAREC 1995-1998 and 1999-2001.
4. Coinvestigador del Proyecto Estudio de familia de Quinonas y N-óxidos como potenciales antiparasitarios utilizando metodologías de resonancia de spin electrónico, técnica de spin-trapping y evaluaciones biológicas (investigador principal: Dr. Claudio Olea) Financiado por FONDECYT Chile 2000-2002.

7. PUBLICACIONES ISI EN LOS ULTIMOS 5 AÑOS

1. **Morello, A.** y Repetto, Y.(1996) Estres Oxidativo y Enfermedad de Chagas. Antioxidantes y Calidad de Vida . Vol 3 (9), 4-6

2. Repetto, Y. Opazo, E., Maya, J.D., Agosin, M. and **Morello, A.** (1996) Glutathione and Trypanothione in several strains of *Trypanosoma cruzi*. Effect of drugs. *Comparative Biochemistry and Physiology*, Vol. 115 B (2), 281-285.
3. Perez Villa J, Perez Villa FC, **Morello A**, Betriu A, Traserra J. Topographic diagnosis of hearing loss in patients with ischemic heart disease. Use of high-rate brain stem evoked response audiometry. (1996) *Acta Otorrinolaringol Esp.* 47(6):441-7. Spanish.
4. Biurrun O, **Morello A**, Traserra J. Surgical multiple level reconstruction of the upper airways for treatment of obstructive sleep apnea. Two clinical cases. *Acta Otorrinolaringol Esp.* (1996) 47(6):479-83 Spanish.
5. Espinosa G, Alarcon A, **Morello A**, Villaseca I, Ayuso JR, Montserrat JM. Obstructive apnea syndrome during sleep secondary to a pharyngeal lymphoma. Improvement with continuous pressure treatment of the upper airway. *Arch Bronconeumol* (1996) 32(10):547-9 Spanish.
6. Idigora A, **Morello A**, Maristany M, Larrosa F, Romero E, Traserra J. Pharyngocoele: a case report and review of literature. *Acta Otorrinolaringol Esp.* (1997) 48(1):73-7. Spanish.
7. Giuffre M, Amato GM, Manfre L, **Morello A.** Discitis in childhood: integrated neuroradiological imaging in diagnosis and follow-up study of one case. *Minerva Pediatr* (1997) 49(3):101-7 Italian
8. Bosh X, Lopez-Soto A, **Morello A**, Olmo A, Urbano-Marquez A. Vitamin D metabolite-mediated hypercalcemia in Wegener's granulomatosis. *Mayo Clin Proc.* (1997) 72(5):440-4
9. Núñez-Vergara, L., Squella, J.A., Aldunate, J., Letelier, M. E., Bollo, S., **Morello, A.**, Repetto, Y. and Spencer P. (1997) Nitro Radical Anion Formation from Nifurtimox I. Biological evidences in *Trypanosoma cruzi*. *Bioelectrochemistry and Bioenergetics.* 43, 151-155.
10. Maya, J.D., Repetto, Y., Agosin, M., Ojeda, J.M., Tellez, R., Gaule, C. and **Morello, A.** (1997) Effect of Nifurtimox and Benznidazole upon the Glutathione and Trypanothione content in Epimastigotes Trypomastigotes and Amastigotes forms of *Trypanosoma cruzi*. *Molecular and Biochemical Parasitology*, 86, 101-106.
11. Núñez-Vergara L., Squella J.A., Bollo S., **Morello A.**, Repetto Y., Aldunate J., and Letelier M.E. (1997). Nitro-Aryl 1,4 Dihydropyridine derivatives: Effects on *Trypanosoma cruzi*. *Comparative Biochemistry and Physiology* 118 C (1), 105-111.
12. Pérez-Victoria J.M., Arana F.E., Repetto Y., **Morello A.**, Castanys S. and Gamarro F. (1998) Involvement of thiol metabolism in the resistance to glucantime in *Leishmania tropica*. *Biochemical Pharmacology* 56, 1201-1208.
13. Benitez PA, **Morello A**, Gaston F, Traserra J. Cerebral abscess of otogenic origin located simultaneously in the temporal and cerebellar regions. *Acta Otorrinolaringol Esp.* (1998) 49(8):650-3
14. **Morello, A.**, Repetto, Y., Tellez, R., Gaule, C. y Maya, J.D. (1998) Bases moleculares de la acción de drogas antichagásicas. *Boletín de la Red de Investigación y Entrenamiento en Enfermedades Parasitarias del Cono Sur de América Latina.* Año 1 N° 0, pp. 38-39.

15. Benitez PA, **Morello A**, Gaston F, Traserra J. Secondary brain herniation. A case report. *Acta Otorrinolaringol Esp.* (1999) 50(3):228-31
16. Rivas,P., Cassels,B.K., **Morello,A.** and Repetto,Y. (1999) Effects of some β -carboline alkaloids on intact *Trypanosoma cruzi* epimastigotes. *Comparative Biochemistry and Physiology* 122 C, 27-31
17. J.D. Maya, **A. Morello**, Y. Repetto, R. Tellez, A. Rodriguez, U. Zelada, P. Puebla, E. Caballero, M. Medarde, L.J. Nuñez-Vergara, J.A. Squella, M. Bonta, S. Bollo and A. San Feliciano. (2000) Effects of 3-chloro-phenyl-1- 4-dihydropyridine derivatives on *Trypanosoma cruzi* epimastigotes. *Comparative Biochemistry and Physiology.* 125C(1):103-109.
18. **Morello A**, Pappalardo S, Di Leonardo S, De Crescenzo L, Virga G. Efficacy of corticosteroid therapy on cerebral gummas: risk and implications. *J. Neurosurg Sci.* (1999) 43(1):53-7
19. **Morello A**, Lentini G, Gambino G, Randisi MG. Stretching (λ) of the spinal cord as a cause od paraplegia in a patient with Cushing's syndrome. *J. Neurosurg Sci.* (1999) 43(3):202-3
20. Aguillon JC, Hermosilla T, Molina MC, **Morello A**, Repetto Y, Orn A, Ferreira A. *Trypanosoma cruzi*: H2 complex and genetic background influence on the humoral immune response against epimastigotes. *Int. J. Parasitol* (2000) 30(9):981-4
21. Riera L, Vilaseca I, **Morello A**, Gaston F, Calvo C. Langerhans cell histiocytosis of the temporal bone. *Acta Otorrinolaringol Esp.* (2000) 51(4):357-60. Review.
22. **Morello A**, Maresi E, Villari L. Late sequelae of pontine lesions by acute uncal herniation. *Minerva Neurochir.* (2001) 45(1):47-52

CURRICULUM VITAE

1. **NOMBRE** : LUIS JOAQUIN NUÑEZ VERGARA
LUGAR Y FECHA DE NACIMIENTO: 07-04-1948, Chile.
2. **GRADO ACADÉMICO:** Químico Farmacéutico. Universidad de Chile. (1971)
3. **POSICIÓN ACTUAL** : Profesor Titular
4. **LINEA DE INVESTIGACIÓN: (3)**
 Caracterización y Reactividad de Radicales libres generados a partir de drogas
 Electroquímica Orgánica: Reducción y Oxidación de Moléculas Orgánicas de
 Relevancia Farmacológica. Desarrollo e Implementación de Metodologías
 Analíticas para la determinación Cuantitativa de Fármacos en diversas Matrices
5. **ACTIVIDAD INVESTIGACIÓN ACTUAL:**
 Caracterización y Reactividad de Radicales libres generados a partir de drogas
 Electroquímica Orgánica: Reducción y Oxidación de Moléculas Orgánicas de
 Relevancia Farmacológica. Desarrollo e Implementación de Metodologías
 Analíticas para la determinación Cuantitativa de Fármacos en diversas Matrices
6. **PROYECTOS: (Últimos 5 años)**
 - Nacional:** 2 Fondecyt (Inv. Principal)
 2 Líneas Complementarias (Inv. Alterno)
 - Internacional:** ECOS-Conicyt. (Inv. Principal)
7. **PUBLICACIONES ISI EN LOS ULTIMOS 5 AÑOS:**
 1. Nitro Radical Anion Formation from nifurtimox I: Biological Evidences in
Trypanosoma cruzi
Luis J. Núñez-Vergara, J. A. Squella., J. Aldunate., M. E. Letelier., S. Bollo., Y.
 Repetto., A. Morello & P. L. Spencer.
Bioelectrochemistry & Bioenergetics. 43 (1), 151-155 (1997)
 2. Redox Behaviour of Nifuroxazide: Generation of the one-electron reduction product
 J. A. squella., M.E. Letelier., L. Lindermeier & **Luis J. Núñez-Vergara**
Chemico-Biological Interactions. 99, 227-238 (1996)
 3. Polarographic determination of Loratadine in Pharmaceutical Preparations
 J. A. Squella., J. C. Sturm., M. A. Díaz., H. Pessoa & **Luis J. Núñez-Vergara**
Talanta, 43 (12) 2029-2035 (1996)

4. Reactivity of the one-electron Reduction Product from Nifedipine with Relevant Biological Targets
Luis J. Núñez-Vergara., P.A. Navarrete-Encina., M.E. Ortiz., S. Bollo & J.A. Squella
Chemico-Biological Interactions, 101, 89-101 (1996)
5. Electrochemical Reduction of Nitrotetralones
J.A. Squella., M. Huerta., S. Bollo., H. Pessoa & **Luis J. Núñez-Vergara**
J. Electroanal. Chem., 420 (1-2) 63-70 (1997)
6. Cytoprotective and antioxidant effects of boldine on tert-butyl hydroperoxide-induced damage to isolated hepatocytes
R. Bannach., A. Valenzuela., B.K. Cassels., **Luis J. Núñez-Vergara** & H. Speisky
Cell Biology & Toxicology, 12 (2), 79-87 (1996)
7. Electrochemical Reduction of Nitrotetralones
J.A. Squella., M. Huerta., S. Bollo., H. Pessoa & **Luis J. Núñez-Vergara**
J. Electroanal. Chem. 420 (1-2) 63-70 [1997]
8. Electroreduction of 4-(nitrophenyl)substituted 1,4-dihydropyridines on the mercury electrode in aprotic medium
J.A. Squella., M. Huerta., S. Bollo., H. Pessoa & **Luis J. Núñez-Vergara**
Electrochimica Acta. 42 (15) 2305-2312 [1997]
9. Reactivity of the one-electron reduction product from nimodipine, nitrendipine and nicardipine with relevant biological thiols
Luis J. Núñez-Vergara., J.E. Guíñez-Castro., S. Bollo & J.A. Squella
Bol. Soc. Chil. Quím. 41, 363-370 [1996]
10. Acyclovir: Voltammetric behaviour and analytical application to pharmaceutical forms
Alvarez-Lueje., **Luis J. Núñez-Vergara.**, M. Vicuña., & J.A. Squella.
Bol. Soc. Chil. Quím. 41, 301-306 [1996]
11. Voltammetric study of ketorolac and its differential pulse polarographic determination in pharmaceuticals
J. C. Sturm., H. Canelo., **Luis J. Núñez-Vergara**, J.A. Squella
Talanta. 44, 931 [1997]
12. Voltammetric behaviour of ketorolac and its HPLC-EC determination in tablets.
J. A. Squella., I. Lemus., J. C. Sturm., & **Luis J. Núñez-Vergara**
Analytical Letters. 30 (3) 553-564 [1997]
13. Nitro aryl 1,4-dihydropyridine derivatives: Effects on *Trypanosoma cruzi*
Luis J. Núñez-Vergara., J. A. Squella., S. Bollo-Dragnic., A. Morello., Y. Repetto., J. Aldunate & M. Letelier.
Comparative Biochemistry & Physiology, 118, 105 [1997]
14. Electrochemical behaviour of isradipine and its polarographic and HPLC-ED determination
J. A. Squella., A. Iturriaga., A. Alvarez-Lueje & **Luis J. Núñez-Vergara**

Proceedings of the 1997 Joint International Meeting of the Electrochemical Society and the international Society of Electrochemistry. Chemical and biological Sensors and analytical electrochemistry Methods, 1997.

15. Electrochemical study of nisoldipine: Analytical application in pharmaceutical forms and photodegradation
Alvarez-Lueje., L. Naranjo., **Luis J. Núñez-Vergara** & J. A. Squella
J. Pharm. Biomed. Anal. 16, 853-862 (1998)
16. Electrochemical generation and reactivity of free radical redox intermediates from ortho- and meta-nitro substituted 1,4-dihydropyridines
Luis J. Núñez-Vergara., M.E. Ortiz., S. Bollo & J.A. Squella
Chemico-Biological Interactions. 106, 1-14 [1997]
17. Cyclic voltammetric and EPR spectroscopic studies of benzodiazepine: loprazolam and flunitrazepam
Luis J. Núñez-Vergara., S. Bollo., C. Olea-Azar., P.A. Navarrete-Encina & J. A. Squella
J. Electroanal. Chem. 436, 227 [1997]
18. Voltammetric Study of nimesulide and its differential pulse polarography determination in pharmaceuticals
Alvarez., P. Vásquez., **Luis J. Núñez-Vergara.**, J.A. Squella
Electroanalysis. 9 (15), 1209-1213 (1997)
19. Isradipine and Lacidipine: Effects *in vivo* and *in vitro* on *Trypanosoma cruzi*
Luis J. Núñez-Vergara., J. A. Squella., S. Bollo-Dragnic., R. Marín-Catalán., L. Pino., G. Díaz & M.E. Letelier
General Pharmacology, 30(1),85 [1998]
20. HPLC determination of nimesulide in tablets by electrochemical detection
A.Alvarez., P. Vásquez., **Luis J. Núñez-Vergara.**, J.A. Squella
Anal. Lett. 31 (7) 1173-1184 (1998)
21. Antioxidant Effects of 1,4-Dihydropyridine and NitrosoAryl Derivatives on the Fe⁺³/Ascorbate Stimulated Lipid Peroxidation in Rat Brain Slices
G. Díaz-Araya., L. Godoy., L. Naranjo., J. A. Squella., M.E. Letelier & **Luis J. Núñez-Vergara**
General Pharmacology. 31 (3), 385-391 (1998)
22. Reactivity of the nitro radical anion formation from nisoldipine with N-acetylcysteine: EPR spectroscopic and electrochemical evidences.
Luis J. Núñez-Vergara., S. Bollo-Dragnic., C. Olea-Azar., P. Santander., S Gunckel & J. A. Squella
Bol. Soc. Chil. Quím. 43, 231-239 (1998)
23. Scavenging of the one-electron reduction product from nisoldipine with relevant thiols: Electrochemical and EPR Spectroscopic Evidences
Luis J. Núñez-Vergara., G.Díaz-Araya., C. Olea-Azar., A.M. Atria., S. Bollo-Dragnic & J. A. Squella

- Pharmaceutical Research*. 15 (11), 1690-1695 (1998)
24. Systematic HPLC study of a new series of 4-methyl-1,4-dihydropyridines with antitrombotic activity
Luis J. Núñez-Vergara, J.C. Sturm., A. Alvarez-Lueje & J.A. Squella
Analytical Letters. 31 (12) 2039-2051 (1998)
 64. Alvarez-Lueje., H. Pessoa., **Luis J. Núñez-Vergara** & J.A. Squella. (1998). Electrochemical reduction of 2,5-dimethoxy nitrobenzenes: nitro radical anion generation and biological activity. *Bioelectrochemistry & Bioenergetics*. 46 (1) 21-29
 65. A.Alvarez-Lueje, C.Peña, **L.J.Núñez-Vergara** and J.A.Squella (1998). Electrochemical study of flutamide, an anticancer drug, and its polarographic, UV spectrophotometric and HPLC determination in tablets. *Electroanalysis* 10 (15) 1043-1051.
 66. S. Bollo., **Luis J. Núñez-Vergara** & J. A. Squella. (1999). Cyclic voltammetry and Digital Simulation of the Electroreduction of ortho- and meta-Nitroaryl 1,4-dihydropyridines. *Bol. Soc. Chil. Quím.* 44, 067-078.
 67. **Luis J. Núñez-Vergara**., J. C. Sturm., A. Alvarez-Lueje., C. Olea-Azar., C. Sunkel & J.A. Squella. (1999). Electrochemical Oxidation of 4-Methyl-1,4-Dihydropyridines in Protic and Aprotic Media. Spin Trapping Studies. *J. of Electrochem. Soc.* 146 (4), 1478-1485.
 68. J.A. Squella., P. González., S. Bollo & **Luis J. Núñez-Vergara**. (1999). Electrochemical Generation and Interaction Study of the Nitro Radical Anion from Nimesulide. *Pharmaceutical Research*. 16 (1), 161-164 (1999)
 69. J. A. Squella., A. Iribarren., J.C. Sturm & **Luis J. Núñez-Vergara**. Electrochemical Determination of Lacidipine. *J. of AOAC International*, in press.
 70. J.A. Squella., J.C. Sturm., B. Weiss-López., M. Bontá & **Luis J. Núñez-Vergara**. (1999). Electrochemical Study of α -nitrostyrene derivatives: steric and electronic effects on their electroreduction. *J. Electroanal. Chem.* 466, 90-98 (1999)
 72. M.Merino, **L.J.Núñez-Vergara** and J.A.Squella. (1999). Reduction of different nitro-compounds on electroenzymatic system: Cytochrome C reductase-NAD(P)H modified carbon paste electrode. *Electroanalysis* 11 (18) 1-8.
 73. A.Álvarez-Lueje, J.C.Sturm, **L.J.Núñez-Vergara**, J.Carbajo and J.A.Squella. (2000). Voltammetric behaviour of clonixin and its differential pulse polarographic determination in tablets. *Analytical Letters* 33 (1) 53-68.
 74. S.Bollo, L.Muñoz, L.J.Núñez-Vergara and J.A.Squella. **Electrochemical Characterization of tacrine, an antialzheimer's disease drug, and its determination in pharmaceuticals. Electroanalysis. In press**
 75. **L.J.Núñez-Vergara**, J.C.Sturm, C.Olea-Azar, P.Navarrete-Encina, S.Bollo and J.A.Squella. Electrochemical, UV-Visible and EPR studies on nitrofurantoin: nitro

radical anion generation and its interaction with glutathione. Free Radical Research
In press

76. M.Merino, J.Carbajo, **L.J.Núñez-Vergara** and J.A.Squilla. Nitroradical anion formation from nitrofurantoin in carbon electrodes. Boletín de la Sociedad Chilena de Química. 45, 091-097 (2000)
77. J.D.Maya, A.Morello, Y.Repetto, R.Tellez, A.Rodriguez, O.Zelada, P.Puebla, E.Caballero, M.Medarte, **L.J.Núñez-Vergara**, J.A.Squilla, M.Bontá, S.Bollo and A. San Feliciano. Effects of 3-chloro-phenyl-1,4-dihydropyridine derivatives on *trypanosoma-cruzi* epimastigotes. Comparative Biochemistry and Physiology. (In press)
78. **L.J.Núñez-Vergara**, J.A.Squilla, C.Olea-Azar, S.Bollo, P.A.Navarrete and J.C.Sturm. Nitrosobenzene: Electrochemical, UV-Vis and EPR spectroscopic studies on the nitrosobenzene free radical generation and its interaction with glutathion. Electrochimica Acta (In Press)

CURRICULUM VITAE

1. **NOMBRE:** CLAUDIO ALBERTO OLEA AZAR
LUGAR Y FECHA DE NACIMIENTO: Santiago, 27 de Septiembre de 1962
2. **GRADO ACADÉMICO:** Doctor en Química
3. **POSICIÓN ACTUAL:** Profesor Asociado
4. **LÍNEA DE INVESTIGACIÓN:** Radicales Libres, Espectroscopia ESR
5. **ACTIVIDAD INVESTIGACIÓN ACTUAL:**
Estudios de Radicales Libres generados en sistemas biológicos mediante espectroscopia de Resonancia de Espín Electrónico y Técnicas de "Spin Trapping"
6. **PROYECTOS: (Ultimos 5 años)**

Nacionales:

 - Proyecto DTI Q3544. Estudio Farmacológico-Cuántico-de la dopamina y sus análogos: aporfinas, tetralinas y ergolinas. Coinvestigador
 - Proyecto Enlace DID EDID99/002. Estudio de Resonancia de Espín Electrónico y de "Spin Trapping" de moléculas con potencial actividad antichagásica. Investigador Principal
 - Proyecto FONDECYT 1000834. Estudio de familias de quinonas y N-óxidos como potenciales antiparasitarios utilizando metodologías de Resonancia de Spin Electrónico, Técnicas de Spin Trapping y Evaluaciones Farmacológicas. Investigador principal

Internacionales:

 - Prtoyecto TWAS 98039 . ESR and spin trapping studies of molecules with potential radical activity in biological system. Investigador principal.
7. **PUBLICACIONES ISI EN LOS ULTIMOS 5 AÑOS:**
 1. Molecular modelling of the H2 histamine receptor. Part 1.
C. Olea-Azar, J. Parra Mouchet, Bruce K. Cassels and G. Lunt.
Molecular Engineering, 6, 297-306, 1996

2. Molecular modelling of antagonists H2 and tridimensional model of H2 receptor interaction. Part 2.
C. Olea-Azar, J. Parra Mouchet and G. Lunt.
Molecular Engineering, 6 307-317, 1996
3. Formation of radical anion by electrochemical reduction of nitromidazol in aprotic solvent.
C. Olea-Azar and E. Norambuena.
Spectroscopy Letters, 29(7), 1367-1379, 1996
4. Free radical formation from loprazolam and flunitrazepam: Cyclic voltammetry and electron paramagnetic resonance.
L. Nuñez-Vergara, M.E. Ortiz, S. Bollo, C. Olea-Azar and J.A. Squella
J. Electroanal. Chem. 436, 227-238, 1997.
5. Conformational studies on 2-guanidinythiazole, famotidine and some analogues.
C. Olea-Azar and J. Parra-Mouchet
J. Mol. Struct. (THEOCHEM), 390, 239-245, 1997 (0.913)
6. Cyclic Voltammetric and EPR spectroscopic studies of benzodiazepines: loprazolam and flunitrazepam.
L. Nuñez-Vergara, M.E. Ortiz, S. Bollo, C. Olea-Azar and J.A. Squella
J. Electroanal. Chem, 436, 227-238, 1997 (1.59)
7. Cyclic Voltammetry and Electron Paramagnetic Resonance studies of some analogues of Nifurtimox.
C. Olea-Azar, Ana Maria Atria, Fernando Mendizabal, Rossanna di Maio, G. Seoane and Hugo Cerecetto.
Spectroscopy Letters, 31, (1), 99-109, 1998 (0.38)
8. Electron Spin Resonance and Cyclic Voltammetry studies of nitrofurane and nitrothiophene analogues of nifurtimox.
C. Olea-Azar, A. Atria, R. di Maio, G. Seoane and Hugo Cerecetto
Spectroscopy Letters, 31, (4), 849-857, 1998 (0.38)
9. 1,2,5-Oxadiazole N-oxide derivatives Hypoxia-selective Cytotoxins. Structure-Activity Relationships
A. Monge, A. Lopez de Cearin, E. Díaz, R. di Maio, M. Gonzalez, S. Onetto, G. Seoane, H. Cerecetto, F. Zinola and C. Olea-Azar
1998 Pharmazie, 53, (10) 698-705, 1998 (0.504)
10. Scavenging of the one-electron reduction product from nisoldipine with relevant thiols: electrochemical and EPR spectroscopic evidences.
L. Nuñez-Vergara, C. Olea-Azar, G. Díaz-Araya, A. Atria, S. Bollo and J. Squella.
Pharmaceutical Research., 15 (11), 1690-1695, 1998 (2.204)
11. On the mechanism of the tautomeric equilibrium of histamine in aqueous solution

- C. Olea-Azar and J. Parra-Mouchet
Boletín de la Sociedad Chilena de Química, 43, 189-200, 1998. (0.357)
12. Reactivity of the nitroradical anion from Nisoldipine with N-Acetylcysteine. EPR spectroscopy and Electrochemical evidence.
L. Nuñez-Vergara, S. Bollo, C. Olea-Azar, P. Santander, S. Gunckel and J.A. Squella.
Boletín de la Sociedad Chilena de Química, 43, 231-237, 1998 (0.357)
 13. 1,2,5- Oxadiazole N-oxide Derivatives and Related Compounds as Potential Antitrypanosomal Drugs. Structure Activity Relationship.
A. Monge, A. Lopez de Cearin, E. Díaz, R. di Maio, M. Gonzalez, S. Onetto, G. Seane,
B. H. Cerecetto and C. Olea-Azar
Journal of Medicinal Chemistry 42, 1941-1950, 1999 (3.615)
 14. Electrochemical Oxidation of 4-Methyl-1,4-Dihydropyridines in Protic and Aprotic Media Spin Trapping Studies
L. Nuñez-Vergara, J.C. Sturm, A. Alvarez-Lueje, C. Olea-Azar, C. Sunkel and J. Squella.
J. Electrochemical Soc., 146, 1478-1485, 1999 (1.994)
 15. Comparative SCF MO studies for some histamine analogues as agonists of the H₂ receptor of histamine.
C. Olea-Azar and J. Parra-Mouchet
Boletín de la Sociedad Chilena de Química, 44, 99-108, 1999 (0.357)
 16. Electrochemical, UV-Visible and EPR studies on Nitrofurantoin: Nitroradical anion generation and its interactions with glutathione.
L. Nuñez-Vergara, J.C. Sturm, A. Alvarez-Lueje, C. Olea-Azar, P. Navarrete-Encina, S. Bollo and J.A. Squella.
Free Rad. Research, en Prensa.
 17. Synthesis and anti-trypanosomal evaluation of E-isomers of 5-nitro-2-furaldehyde and 5-nitrothiophene-2-carboxaldehyde semicarbazone derivatives. Structure-activity relationships.
Hugo Cerecetto, Rossanna Di Maio, Mercedes González, Mariela Risso, Gabriel Sagrera, Gustavo Seoane, Ana Denicola, Gonzalo Peluffo, Celia Quijano, Miguel Angel Basombrío, Andrés O.M. Stoppani, Margot Paulino, Claudio Olea-Azar
Eur.J. Med. Chem, 1999 aceptado (0.809)
 18. Oxidation of the dopaminergic neurotoxin salsolinol to semiquinone radical and o-quinone tautomers: A possible mechanism of neurotoxicity.
Juan Segura-Aguilar, Diana Metodiewa, Christopher J. Welch and Claudio Olea-Azar.
Aceptado en Free Rad. Research

19. Singlet Oxygen-Dependent Hydroxyl Radical Formation during Uroporphyrin Mediated Photosensitization in the presence of NADPH
K. Takeshita, C. Olea-Azar and T. Ozawa.
Enviado a Antioxidant and Agent Reduction.
20. Knowledge ASSISTED Design of Potentially Active Anti-trypanosomal Compounds.
M. Paulino, F. Iribarne, M. Hansz, M. Vega, G. Seoane, H. Cerecetto, R. Di Maio, I. Caracelli, J. Zukerman-Schpector, C. Olea-Azar, A.O.M Stoppani, A.H. Fairlamb, O. Tapia.
Enviado a Eur. J. Med. Chem.

CURRICULUM VITAE

1. **NOMBRE:** JAVIER PUENTE PICCARDO

LUGAR Y FECHA DE NACIMIENTO : 17-11-1948, Chile.

2. **GRADO ACADÉMICO :** Doctor en Bioquímica . Universidad de Chile. 1985

3. **POSICIÓN ACTUAL:** Profesor Titular

4. **LÍNEA DE INVESTIGACIÓN:**

AREA : Immunología

5. **ACTIVIDAD INVESTIGACIÓN ACTUAL :** Citotoxicidad mediada por células NK y su relación con la defensa contra la infección. Rol de la bacteria (*Salmonella typhi*), productos bacterianos y células monocíticas infectadas sobre la función de células natural killer humanas. Citotoxicidad, secreción de cytokina y fenotipo.

6. **PROYECTOS:**

Internacionales:

Nacionales: Fondecyt.

7. **PUBLICACIONES ISI EN LOS ULTIMOS 5 AÑOS:**

1. J. Puente, M.A. Salas, C. Cañón, D. Miranda, M. Wolf, A.D. Mosnaim, (1996) Activation of protein tyrosine kinase: A possible requirement for fixed bacteria and lipopolysaccharide-induced increase in human natural killer cell activity. Intern. J. Clin. Pharm. Ther. **34**(5) 212-218).

2. C. Sepúlveda, J. Puente, C. Weinstein, M. Wolf, A.D. Mosnaim (1997). Enhancement of natural killer cell activity in HIV – infected subjects by a mixture of the calcium ionophore A23187 and the phorbol ester TPA. Am. J. Ther. **4**, 413-421

3. S. Gloger, J. Puente, P. Arias, P. Fischman, Y. Caldumbide, R. González, J. Quiroz, O. Echavarrí, C. Ramírez, (1997) Respuesta inmune disminuida por estrés académico intenso: cambios de la proliferación linfocitaria en estudiantes de medicina. Rev. Méd. Chile. **125**, 665-670)

4. A.D. Mosnaim, H. Kaluga, A. Adams, M., Wolf, J. Puente, F. Freitag, S. Diamond (1998). Flow cytometric analysis of lymphocyte subsets in migraine patients during and outside of an acute headache attack. Cephalalgia **18** (4) 197 - 201 (1998).

5. D. Miranda, J. Puente, L.P. Blanco & A.D. Mosnaim. "Effect of bacterial lipopolysaccharide on human NK cells". Res. Comm. Mol. Pathol. Pharmacol. **100** (1) 3-14 (1998).

CURRICULUM VITAE

1. **NOMBRE:** INES ELISA RUIZ ALVAREZ
2. **GRADO ACADÉMICO:** Químico Farmacéutico. Universidad de Chile. 1970
3. **POSICIÓN ACTUAL:** Profesor Titular
4. **LINEA DE INVESTIGACION:** Farmacia Clínica, Farmacoepidemiología.
5. **ACTIVIDAD INVESTIGACIÓN ACTUAL:**
6. **PROYECTOS: (Ultimos 5 años)**
7. **PUBLICACIONES ISI EN LOS ULTIMOS 5 AÑOS:**
 1. Busto U.E., Ruiz I., Busto M., Gacitúa A., (1996). Benzodiazepine use in Chile: Impact of Availability on use, abuse, and dependence, *J. Clin. Psychopharmacol.*, 5:363-372.
 2. I. Ruiz, E. Pinilla, (1997). La piel y los efectos adversos de los medicamentos. Aspectos generales de farmacovigilancia, *Rev. Chil. Dermatol.* 13:119-124
 3. I. Ruiz, (1997). The ideal profile of the pharmacist. Reaction from Chile. In *The Role of the Pharmacist in the Health Care System. Preparing the Future Pharmacist: Curricular, Development, Report of a Third WHO Consultative Group on th Role of the Pharmacist, WHO/PHARM/97/599*, Geneva, pp.24-25.
 4. Pezzani M., Soto P., Pineda R., Pinilla E., Ruiz I.(1998). Evaluación de la lactancia materna en Santiago. Un estudio realizado en la oficina de farmacia. *Revista Chilena de Pediatría* 69:99-103.
 5. Morales-Díaz M., Pinilla E., Ruiz I.(1999), Suspected carbamazepie-induced hepatotoxicity *Pharmacotherapy* 19:252-255.
 6. Soto P., Ruiz I., Pezzani M., Pinilla E., Quinteros J. (1999) Análisis de las peticiones de antimicrobianos para pacientes pediátricos en farmacias privadas de Chile, *Revista Chilena de Infectología*, 16: 191-198.

Informes Técnicos:

- Para Organización Panamericana de la Salud: **Ruiz I.**, Pinilla E., Soto P., Pineda R., Pezzani M., Uso de anorexígenos en la práctica clínica y en la automedicación en Chile, 1998 (34 pág.)
- Participación en la redacción de "Principios para el uso de farmacoterapia en la obesidad", Ministerio de Salud, Depto. Programa de las Personas, Unidad de Farmacia, 2000 (11 pág.)

Trabajo en Extenso en Actas de Reunión Científica

- Ruiz Y., Some gender-related differences in the use of drugs in Chile. In Berg. MJ., Francke G.N. Rolling M.R., Proceedings" Gender-related health issues, International of Women in Pharmacy, 55th World Congresses of Pharmacy and Pharmaceutical Sciences, August 20-30, Stockholm, Sweden 1996, pág. 117-120.

CURRICULUM VITAE

1. **NOMBRE:** AURELIO SAN-MARTIN BARRIENTOS
LUGAR Y FECHA DE NACIMIENTO: Santiago, 12 de Noviembre, 1946
2. **GRADO ACADÉMICO:** Doctor en Ciencias Químicas.
3. **CARGO ACTUAL:** Profesor Titular.
4. **LINEAS DE INVESTIGACION:**
 - Química Orgánica
 - Productos Naturales y sus actividades biológicas.
5. **ACTIVIDAD INVESTIGACIÓN ACTUAL:**
 - Estudio químico de cultivos de microorganismos marinos
 - Aislamiento de monoterpenos del alga *Plocarium cartilagineum*. Transformaciones químicas y determinación de la actividad insecticida.
 - Estudio químico de los metabolitos de los géneros *Azorella* y *Mulinum*.
6. **PROYECTOS: (Últimos 5 años)**
Nacionales:
 - Estudio químico comparativo de organismos marinos de la Antártica y litorales ribereños y de la Patagonia. Proyecto de Colaboración entre la U. de Chile y el Consejo Superior de Investigaciones Científicas de España.
 - Sustancias bioactivas de algas e invertebrados marinos antárticos. Actividad farmacológica: Instituto Antártico Chileno.
 - Estudio químico microorganismos marinos. Actividad biológica de sus metabolitos. Fondecyt
7. **PUBLICACIONES ISI EN LOS ÚLTIMOS 5 AÑOS:**
 1. Labdane diterpenes from the marine pulmonate gastropod *Trimusculus peruvianus*.
A. San-Martín, E. Quezada, P. Soto, Y. Palacios and J. Roviroso.
Canadian Journal of Chemistry 74, 12, 2471, (1996).
 2. Mulinolic acid, a diterpenoid from *Mulinum crassifolium*.
L. A. Loyola, J. Bórquez, G. Morales and **A. San-Martín**.
Phytochemistry, 43, 165, (1996).
 3. Semisíntesis y actividad biológica de derivados del sesquiterpeno pacifenol.
A. San-Martín, J. Roviroso, J. Darías y L. Astudillo.
Bol. Soc. Chil. Quím. 41, 403, (1996).

4. A new C₁₅ acetogenin from the marine alga *Laurencia claviformis*.
A. San-Martín, J. Darías, H. Soto, C. Contreras, J. S. Herrera and J. Roviroso.
Natural Products Letters. 10, 303, (1997).
5. Efectos en aorta y aurícula aislada de rata de diacetil epitaondiol, diterpenoide del alga *Styopodium flabelliforme*.
J. L. Martínez, S. P. Sepulveda, J. Roviroso y **A. San-Martín**.
Anal. Asoc. Quim. Arg. 85, (1-2), 69, (1997).
6. Diterpenoids from *Azorella compacta*.
L. A. Loyola, J. Bórquez, G. Morales and **A. San-Martín**.
Phytochemistry, 44, 649, (1997).
7. Antimicrobial activity of the brown alga *Styopodium flabelliforme* constituents
J. Roviroso and **A. San-Martín**.
Fitoterapia, 68, 473, (1997).
8. A new diterpenoid from *Mulinum crassifolium*.
L. A. Loyola, J. Bórquez, G. Morales and **A. San-Martín**.
Bol. Soc. Chil. Quím 42, 311, (1997).
9. The compound 14-keto-stypodiol diacetate from the algae *Styopodium flabelliforme* inhibits microtubules and cell proliferation in Du-145 human prostatic cells.
S. Depix, J. Martínez, F. Santibañez, J. Roviroso, **A. San-Martín** and R. B. Maccioni.
Molecular and Cellular Biochemistry, 187, 191, (1998).
10. New acetyl derivatives from Antarctic *Delisea fimbriata*.
M. Cueto, J. Darías, J. Roviroso and **A. San-Martín**.
J. Nat. Prod. 60, 279 (1997).
11. Mulinol, a diterpenoid from *Azorella compacta*.
L. A. Loyola, J. Bórquez, G. Morales and **A. San-Martín**.
Phytochemistry, 45, 1465 (1997).
12. 11,12-Epoxy-Molin-13-en-20-oic acid, a diterpenoid from *Azorella compacta*.
L. A. Loyola, J. Bórquez, G. Morales and **A. San-Martín**
Phytochemistry, 49(4)1091-1093 (1998)
13. Unusual polyoxygenated monoterpenes from the Antarctic alga
M. Cueto, J. Darías, J. Roviroso, and **A. San-Martín**
J. Nat. Prod, 61 (1), 17, (1998).
14. Pantoneurotriols: Probable biogenetic precursors of oxygenated monoterpenes from Antarctic *Pantoneura plocamioides*.
M. Cueto, J. Darías, J. Roviroso, and **A. San-Martín**.
Tetrahedron, 3575,(1998).
15. Estudio químico de dos especies de esponjas marinas del sur de Chile

- L. A. Astudillo, J. M. Sánchez y **A. San-Martín**.
Bol. Soc. Chil. Quím. 43, 3, (1998).
16. Insecticidal activity of *Plocamium cartilagineum* metabolites.
V. H. Argandoña, T. del-Pozo, **A. San-Martín** and J. Roviroso.
Bol. Soc. Quím. (aceptado)
17. Tetrahydropyran Monoterpenes from *Plocamium cartilagineum* and *Pantoneura plocamioides*.
M. Cueto, J. Darias, **A. San Martín**,. and J. Roviroso.
J. Nat. Prod. 61, 1466 (1998).
18. Azorellanol : A Diterpenoid with a New Carbon Skeleton from *Azorella Compacta*.
L. A. Loyola, J. Bórquez, G. Morales, **A. San-Martín**, V. Manríquez
Tetrahedron, 15533, (1998).
19. Sesquiterpenes from *Laurencia claviformis*.
J. Roviroso, H. Soto, **A. San-Martín**, J. Darias. J. Herrera and M. Cueto.
Phytochemistry (50,745-748 (1999).
20. Mulinane-type diterpenoids from *Laretia acaulis*
L. A. Loyola, J. Bórquez, G. Morales and **A. San-Martín**.
Phytochemistry (en prensa)
21. Azorellane diterpenoids from *Laretia acaulis*, and its toxoplasmacidal activity.
L. A. Loyola, J. Bórquez, G. Morales, J. Araya, J. González, I. Neira, H. Sagua and
A. San-Martín.
Bol. Soc. Chil. Quím. (enviado 1999).

CURRICULUM VITAE

1. **NOMBRE:** HERNÁN SPEISKY COSOY
LUGAR Y FECHA DE NACIMIENTO: Santiago, Chile, Abril 15, 1953.
2. **GRADO ACADÉMICO:** Doctor en Ciencias
3. **POSICIÓN ACTUAL:** Profesor Asociado
4. **LÍNEAS DE INVESTIGACIÓN:**
 1. Radicales libres y Antioxidantes en Nutrición
 2. Aspectos moleculares de la Toxicidad de Metales
5. **ACTIVIDAD DE INVESTIGACIÓN ACTUAL:**
 - a) Desarrollo de un potencial biomarcador de sobre-exposición a cobre: Estudios *in vitro* e *in vivo*
 - b) Evaluación de la actividad antioxidante de polifenoles de origen natural
6. **PROYECTOS: (Ultimos 5 años)**

Nacionales:

Internacionales:
7. **PUBLICACIONES ISI EN LOS ULTIMOS 5 AÑOS:**
 1. Luza, S. and Speisky, H.
Liver Copper Storage and Transport During Development: Implications for Cytotoxicity.
Am. J. Clin. Nutr. (Review article) 63: 812S-820S, 1996.
 2. Bannach, R., Valenzuela, A., Cassels, B.K., Nuñez-Vergara, L. and Speisky, H.
Cytoprotective and Antioxidant Effects of Boldine on *Tert*-Butyl-Hydroperoxide-Induced Damage To Isolated Hepatocytes.
Cell Biol. & Toxicol. 12:2, 89-100, 1996.
 3. Méndez, E., Sanhueza, J., Speisky, H., and Valenzuela, A.
Validation of the Rancimat test for the assessment of the relative stability of fish oils.
J. Am. Oil Chem. Soc. 73: 1033-1037, 1996.
 4. Méndez, E., Sanhueza, J., Speisky, H., and Valenzuela, A.
Comparison of Rancimat evaluation modes to assess oxidative stability of fish oils.

- J. Am. Oil Chem. Soc.** 74:4, 331-332, 1997.
5. Gotteland, M., Jiménez, I., Brunser, O., Guzman, L., Romero, S., Cassels, B. and **Speisky, H.**
Protective effect of boldine in experimental colitis.
Planta Medica 63: 311-315, 1997.
6. Jiménez, I; Gotteland, M; Zarzuelo, A. Uauy, R. and **Speisky, H.**
Loss of the metal binding properties of metallothionein induced hydrogen peroxide and free radicals.
Toxicology 120: 37-46, 1997.
7. Aposhian, V., Arroyo, A., Cebrian, M., Del Razo, L.M., Hurlbult, K.H., Dart, R.C., González-Ramírez, D., Kreppel, H., **Speisky, H.**, Smith, A., Gonsebatt, M.E., Ostrovsky-Wegman, P. and Aposhian, M.M.
DMPS-Arsenic challenge test: I-Increased urinary excretion of monomethylarsonic acid in humans given dimercaptopropane sulphonate.
J. Pharmacol. Exp. Ther. 282(1): 192-200, 1997.
8. Olivares, M., Pizarro, F., **Speisky, H.**, Lönnerdal, B. and Uauy, R.
Copper In Infant Nutrition: Safety Of World Health Organization Provisional Guideline Value For Copper Content Of Drinking Water.
Journal of Pediatrics Gastroenterology & Nutrition 26: 251-257, 1998.
9. Méndez, E., Sanhueza, J., Nieto, S., **Speisky, H.**, and Valenzuela, A.
Fatty acid Composition, Extraction, Fractionation, and Stabilization of Bullfrog (Rana catesbeiana) Oil.
J. Am. Oil Chem. Soc. 75:1, 67-71, 1998.
10. Ganga, A., Nieto, S., Sanhueza, J., Romo, C., **Speisky, H.** and Valenzuela, A.
Concentration/ stabilization of n3 polyunsaturated fatty acids from sardine oil. **J. Am. Oil Chem. Soc.** 75:6, 733-736, 1998.
11. Asencio, M., Delaquerriere, B., Cassels, B., **Speisky, H.**, Comoy, E., and Protais, P.
Biochemical and behavioral effects of boldine and glaucine on dopamine systems.
Pharmacol. Biochem. Behav. 62:1, 7-13, 1999.
12. Jiménez, I. and **Speisky, H.**
Effects of copper ions on the free radical-scavenging properties of reduced glutathione: Implications of an adduct formation.
Trace Elem. Biol & Med. (Vol 14(2): en prensa) 2000.
13. Jiménez, I., Garrido, A., Bannach, R., Gotteland, M., and **Speisky, H.**
Protective effects of boldine against free radical-induced erythrocyte lysis.
Phytother Res. (Vol 14(5):339-43 2000.
14. Jiménez, I. and **Speisky, H.**
Biological disposition of boldine: *In vitro* and *in vivo* studies.
Phytotherapy Res (Vol 14(2): en prensa) 2000.

CURRICULUM VITAE

1. **NOMBRE:** JUAN ARTURO SQUELLA SERRANO
LUGAR Y FECHA DE NACIMIENTO: 16-06-1950. Chile.
2. **GRADO ACADÉMICO:** Químico. Universidad de Chile (1975)
3. **POSICIÓN ACTUAL:** Profesor Titular
4. **LINEA DE INVESTIGACIÓN:** Bioelectroquímica de fármacos
5. **ACTIVIDAD INVESTIGACIÓN ACTUAL :** Estudios electroquímicos de componentes farmacéuticos.
6. **PROYECTOS: (Últimos 5 años)**
National: Fondecyt, DID U.Chile.
International: ECOS-Conicyt, CNRS-Connicyt, ICI MECE España.
7. **PUBLICACIONES ISI EN LOS ÚLTIMOS 5 AÑOS:**
 1. Redox behaviour of Nifuroxazide: generation of the one-electron reduction product.
J.A.Squella, M.E.Letelier, L.Lindermeyer & L.J.Núñez-Vergara.
Chemico-Biological Interactions. 99, 227-238 (1996).
 2. Polarographic determination of loratadine in pharmaceutical preparations.
J.A.Squella, J.C.Sturm, M.A.Díaz, H.Pessoa & L.J.Nuñez-Vergara.
Talanta 43(12) 2029-2035 (1996)
 3. Reactivity of the one-electron reduction product from nifedipine with relevant biological targets.
L.J.Nuñez-Vergara, P.A.Naverrete-Encina, M.E.Ortiz, S.Bollo & **J.A.Squella**.
Chemico-Biological Interactions. 101, 89-101 (1996)
 4. Reactivity of the one-electron reduction product from nimodipine, nitrendipine and nicardipine with relevant biological thiols.
Luis Núñez-Vergara, J.E.Guiñez-Castro, S. Bollo & **J.A. Squella**
Bol. Soc. Chi. Quim. 41, 363-370 (1996)
 5. Acyclovir: Voltammetric behaviour and analytical application to pharmaceutical forms

- A.Alvarez-Lueje, L.J.Núñez-Vergara, M.Vicuña & **J.A.Squella**
Boletín de la Sociedad Chilena de Química.41,301-306 (1996)
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A.Alvarez-Lueje, H. Pessoa, L.J.Núñez-Vergara and **J.A.Squilla**
Bioelectrochemistry and Bioenergetics. 46 (1) 21-9 (1998)
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S. Gunckel, P. Santander, G. Cordano, J.Ferreira, S. Muñoz, L.J.Núñez-Vergara and **J.A.Squilla**
Chemico-Biological Interactions 114 (1-2) 45-49 (1998)
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Boletín Sociedad Chilena de Química 44 67-78 (1999)
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J. of AOAC International 5 1077-1082 (1999)
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Analytical Letters 33 (1) 53-68 (2000)
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Boletín de la Sociedad Chilena de Química.46 (2) (2001)
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characterization of ortho- and meta-nitrosotoluene derivatives.
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A.Alvarez-Lueje, J.C.Sturm, L.J.Núñez-Vergara and **J.A.Squilla**.
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49. Cyclic voltammetry studies on the nitro radical anion formation from megalol and
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J.D.Maya, A.Morello, Y.Repetto, A.Rodriguez, P.Puebla, E.Caballero, M.Medarde,
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of tuberculosis.
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Analytical Letters. 34 (13) 2001

CURRICULUM VITAE

1. **NOMBRE:** RICARDO ELIAS UAUY DAGACH
LUGAR Y FECHA DE NACIMIENTO: Santiago, 29 de Diciembre 194
2. **GRADO ACADÉMICO:** Doctor en Ciencias
3. **POSICIÓN ACTUAL:** Profesor Titular
4. **LÍNEA DE INVESTIGACIÓN:** Acidos grasos esenciales y desarrollo del sistema nervioso, Necesidades de Energía y Proteínas bajo Salud y Enfermedad. Esencialidad y toxicidad del cobre
- 5.- **ACTIVIDAD INVESTIGACIÓN ACTUAL:** Acidos grasos esenciales y desarrollo del sistema nervioso, Necesidades de Energía y Proteínas bajo Salud y Enfermedad. Esencialidad y toxicidad del cobre
6. **PROYECTOS: (Últimos 5 años)**

Fondecyt N° 1990078 " Metabolismo de ácidos grasos esenciales (AGE) en el recién nacido: equivalencia de precursores e intermediarios en la síntesis de ácidos grasos poliinsaturados de cadena larga de la series n-6 y n-3 (Investigador responsable)

Fondecyt 1000852 " Funcion de la metalotioneina en el manejo celular de cobre y en la regulación de su propia expresión génica. (Co-investigador)

Internacionales:
7. **PUBLICACIONES ISI EN LOS ÚLTIMOS 5 AÑOS:**
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 2. Bickerton A., Birch R., Jackson A., **Uauy R.**, Persaud C., Gattas V., Barrera G. Protein quality and urea kinetics in prepubertal Chilean schoolboys. Int. J. Food Sci. Nutr. 47: 61-70, 1996.
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5. Olivares M., **Uauy R.** Limits of Metabolic Tolerance to Copper and Biological Basis for Present Recommendations and Regulations. *Am. J. Clin. Nutr.* 63: 846S-852S, 1996.
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12. Lonnerdal B., **Uauy R.** Guest Scientific Eds. Genetic and Environmental Determinants of Copper Metabolism. Proceedings of an International Conference held in Bethesda, Maryland. *Am. J. Clin. Nutr.* 67:(5)S, 1998.
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15. Pizarro F., Olivares M., **Uauy R.**, Contreras P., Rebelo A. and Gidi V. Acute gastrointestinal effects of graded levels of copper in drinking water. *Environmental Health Perspective* 107 (2): 117-121, 1999.
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18. **Uauy R** Nutrition throughout the life cycle. *Eur J Clin Nutr.* 53: Suppl 3:S8, 1999
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22. Hoffman D., Birch E., Birch D., **Uauy R.** Fatty acid profile of buccal cheek cell phospholipids as an index for dietary intake of docosahexaenoic acid in preterm infants. *Lipids* 34:337-342, 1999.
23. **Uauy R.**, Peirano P Breast is best: human milk is the optimal food for brain development *Am J Clin Nutr* 70:433-4, 1999
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25. **Uauy R.**, Mena P, Rojas C. Essential fatty acid metabolism in the micropemie. *Clinics in Perinatology* 27(1); 71-93, 2000.
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27. Birch EE, Garfield S, Hoffman DR, **Uauy R**, Birch D. A randomized controlled trial of early dietary supply of long-chain polyunsaturated fatty acids and mental development in term infants. *Dev Med Child Neurol*. 42(3):174-81, 2000
28. **Uauy R.**, Mena P., Rojas C. Essential fatty acids in early life: structural and functional role. *Proceedings of Nutrition Society* 59:3-15, 2000
29. Arredondo A, **Uauy R**, González M. Regulation of copper uptake and transport in intestinal cell monolayers by acute and chronic copper exposure. *Biochem Biophys Acta* 1474(2):169-176, 2000
30. **Uauy R**, Valenzuela A. Marine oils: the health benefits of n-3 fatty acids. *Nutrition*(2000) 16(7-8):680-4
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CURRICULUM VITAE

1. NOMBRE: LUIS ALBERTO VIDELA CABRERA

LUGAR Y FECHA DE NACIMIENTO: 14 de Febrero de 1944

2. GRADO ACADÉMICO: Bioquímico

3. POSICIÓN ACTUAL: Profesor Titular, Jefe de la Sección "Farmacología del estrés oxidativo", Programa de Farmacología Molecular y Clínica, ICBM, Facultad de Medicina, Universidad de Chile

4. LÍNEA DE INVESTIGACIÓN:

Estrés oxidativo y hepato-toxicidad

5. ACTIVIDAD INVESTIGACIÓN ACTUAL

"rol de las células de Kupffer en la injuria hepatocelular: relación entre estrés oxidativo y balance entre citoquinas pro- y antiinflamatorias"

6. PROYECTOS: (Últimos 5 años)

Nacionales: FONDECYT 1000887 (2000-2002)

Internacionales: Proyectos colaborativos con los grupos de la Dra. Susana Puntarulo (Universidad de Buenos Aires, Argentina) y Dra Virginia B.C. Junqueira (Universidade Federal de Sao Paulo, Brasil) (Proyecto de Incentivo a la Cooperación Internacional FONDECYT 7000887).

7. PUBLICACIONES ISI EN LOS ÚLTIMOS 5 AÑOS:

1. FERNANDEZ V, VIDELA LA, Effect of hyperthyroidism on the biliary release of thiobarbituric acid reactants in the rat. *Toxicology Letters* 84: 149-153 (1996)
2. RODRIGO R, NOVOA E, THIELEMANN L, GRANATA P, VIDELA LA, Mechanism of enhancement of renal (Na⁺ + K⁺)-ATPase activity following chronic ethanol exposure. *Acta Physiologica, Pharmacologica et Therapeutica Latinoamericana* 46: 49-56 (1996).
3. FERNANDEZ V, VIDELA LA, Biochemical aspects of cellular antioxidant systems. *Biological Research* 29: 177-182 (1996).
4. FERNANDEZ V, VIDELA LA, Respective roles of nitric oxide and superoxide radical in the respiratory burst activity of rat polymorphonuclear leukocytes induced by hyperthyroidism. *Redox Report* 2: 317-321 (1996).
5. FERNANDEZ V, VIDELA LA, Hepatic glutathione biosynthetic capacity in hyperthyroid rats. *Toxicology Letters* 89: 85-89 (1996).

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7. TAPIA G, PEPPER I, SMOK G, VIDELA LA, Kupffer cell function in thyroid hormone-induced liver oxidative stress in the rat. *Free Radical Research* 26: 267-279 (1997).
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10. TAPIA G, CORNEJO P, FERREIRA J, FERNANDEZ V, VIDELA LA, Acetaminophen-induced liver oxidative stress and hepatotoxicity: influence of Kupffer cell activity assessed in the isolated perfused rat liver. *Redox Report* 3: 213-218 (1997).
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